

Remarks

By the foregoing Amendment, claims 11, 22 and 24 are amended, and claims 3 and 25 are cancelled. No new matter is added by this Amendment. Entry of the Amendment, and favorable consideration thereof, is earnestly requested.

The Office Action rejects independent claims 1, 22, and 24 under 35 U.S.C. §102(b) as anticipated by Tsuji, U.S. Patent No. 5,220,198. Accordingly, these claims have been amended.

Specifically, each of independent claims 1, 22, and 24 has been amended to include the feature that the claimed third section of the circuit board arranged between the first and second sections has a substantially V-shaped configuration, previously recited in claims 3 and 25. Claims 3 and 25 have been cancelled. Tsuji discloses no such feature.

Applicants note that claims 3 and 25 were previously rejected under 35 U.S.C. §103 as obvious over Tsuji at the time of the invention in view of Pelchy, U.S. Patent No. 5,754,313 (“Pelchy ‘313”). However, Applicants respectfully submit that independent claims 1, 22, and 24 were not obvious over Tsuji in view of Pelchy ‘313, for several reasons, as set forth below.

The Office Action correctly observes that Pelchy '313 discloses hybrid boards (61, 62) that are inclined inwardly from the imager package toward the transmission wires. O.A. at 7. The Office Action then states that, in light of this disclosure in Pelchy '313, "it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have used hybrid boards 61 and 62 that are inclined inwardly from the imager package toward the transmission wire 33-33 in a substantially V-shape in order to protect the electrical components located at the bottom of the package and the need of a substrate is eliminated as taught in Pelchy '313". O.A. at 8.

However, Applicant first respectfully notes that Pelchy '313 actually does not teach this, as the objectives of protecting the electrical components and eliminating the need for a substrate are not related to the tapering of the hybrid boards (61, 62). Rather, as stated at Col.5, Ins. 63-67, protecting the electrical components and eliminating the need for a substrate are reasons the Pelchy device uses a block of encapsulating material, not why the boards are tapered ("By bonding or partially encapsulating the bottom surface of the TAB package in the resin block, the active electrical components..."). Pelchy '313 offers no reason that would motivate one skilled in the art to alter the design of another imager like Tsuji to include a tapered circuit board section. *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 1741 (2007) ("it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does").

More significantly, even if a combination of Tsuji and Pelchy '313 were proper and Pelchy '313 would motivate one skilled in the art to modify the design of Tsuji, one would still not arrive at the presently claimed invention. Specifically, claim 1 recites a circuit board with a "third section having a substantially V-shaped configuration being arranged between the first and the second sections..." First, the structure disclosed in Pelchy '313 *do not even form a "V" shape*, but rather, simply comprises two non-parallel boards (which do not join together to form a "V"). Second, this shape *is formed from the two main boards*, not a third section arranged between those boards. *Pelchy '313*, Fig. 6. The only modification that Pelchy '313 could arguably teach one skilled in the art to make to Tsuji would be to similarly incline Tsuji's first and second sides (51b, 51c). Pelchy '313 does not disclose using a third section, opposite the imager, that has a V-shaped configuration. Rather, it simply discloses inclining its two main hybrid boards (61, 62). Indeed, Tsuji itself, in the figure cited in the Office Action, already discloses such a structure. *Tsuji*, Fig. 18. Accordingly, to the extent that Pelchy '313 would teach one skilled in the art to make a design change to other imagers such as Tsuji, the only teaching it would arguably provide is, as the Office Action states, to use "boards 61 and 62 that are inclined inwardly from the imager package toward the transmission wires...". It offers no teaching of using a V-shaped third section between the main first and second board sections.

Finally, Tsuji even teaches away from altering its third section in this way. Specifically, while Tsuji does teach using a folded board, including a section between

the first and second sides opposite the imager, it teaches to do this by employing a fixing member (206) inside the bottom *planar* section, around which the board is bent. Col.12, Ins. 10-12; Fig. 18. Accordingly, Tsuji specifically teaches away from the modification required to arrive at the presently claimed invention. *In re ICON Health and Fitness Inc.*, 83 U.S.P.Q.2d 1746 (Fed. Cir. 2007) (“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.”).

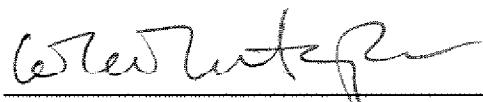
Independent claims 22 and 24, as amended, likewise include a third section having a substantially V-shaped configuration. Accordingly, Applicants submits that these claims also patentable over the cited art for the reasons set forth above.

Applicant also submits that, because generic claim 1 is allowable for the reasons set forth above, withdrawn claims 6, 7, 10-12, and 16 are also allowable.

It is respectfully submitted that claims 1-2, 4-8, and 10-19 and 21-24, all of the claims remaining in the application, are in order for allowance, and early notice to that effect is respectfully requested.

Respectfully submitted,

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Wesley W. Whitmyer, Jr., Registration No. 33,558
David W. Aldrich, Registration No. 51,159
Attorney for Applicants
ST.ONGE STEWARD JOHNSTON & REENS LLC
986 Bedford Street
Stamford, CT 06905-5619
203 324-6155